

2 SEMI-ANNUAL MD 3183V22 INFLATABLE PFD INSP/LEAK TEST

REFERENCES:

MPC [KB0096.0](#)
MPC [KB0107.0](#)

TOOLS/TEST EQUIPMENT:

NONE

EXPENDABLES:

Accessory Pocket (Selected) (If required):

Black, P/N: MA6000-BK, CAGE: 1LV23, NIIN: N/A (Deployable Specialized Forces (DSF) personnel only)

Orange, P/N: MA6000-OR, CAGE: 1LV23, NIIN: 01HS21188

MD 3183v22, P/N: MD3183-22, CAGE: 1LV23, NIIN: 01HS21170 (If required)

Rearm Kit, P/N: MA7214 22, CAGE: 1CJ91, NIIN: 01HS21185 (If required)

CONSUMABLES:

Leak Test Compound, P/N: MIL-PRF-25567E, CAGE: 81349, NIIN: 006211820 (Or equivalent)

Repair Kit, HIT Window, P/N: RE0013, CAGE: 1LV23, NIIN: N/A (If required)

A INSPECT PFD

WARNING

VARIOUS STEPS IN THIS PROCEDURE EMPLOY ITEMS ON THE HAZARDOUS MATERIALS LIST. BEFORE EXECUTING THIS MPC, REFER TO THE APPLICABLE MSDS/SDS FOR FULL SAFETY AND HANDLING PROCEDURES.

NOTE: A damaged or missing Hydrostatic Inflator Technology (HIT) window, (Refer to [Figure 1](#)), does not affect the performance of the PFD's hydrostatic inflator. The PFD need not be removed from service solely for damaged or missing HIT window. The HIT window may, but is not required to be, replaced at the discretion of the unit. Replacement kits are available through Mustang Survival.

1. Check PFD over its entire surface for the following:
 - a. Cuts.
 - b. Tears.
 - c. Seam separation.
 - d. Loose stitching.
 - e. Damaged HIT window.
 - (1) Replace HIT window, P/N: RE0013, (If required).
2. Check the attached D-ring for the following:
 - a. Corrosion.
 - b. Damage.
 - c. Security of attachment.
3. Inspect the waist/chest buckles for proper operation.



4. Inspect required PFD markings for legibility.

NOTE: PFD repairs may be covered under warranty.

5. Remove PFD from service if any above discrepancies are noted.
 - a. Send PFD to repair facility if repair cost does not exceed the replacement cost.
 - b. Replace PFD, P/N: MD3183-22, if repair cost exceeds the replacement cost.
6. Check PFD accessory pockets for the following:
 - a. Cuts.
 - b. Tears.
 - c. Operability of slide fasteners.

NOTE: Black (BK) pouches are authorized for DSF personnel only.

7. Replace accessory pocket(s), P/N: MA6000-BK, or, P/N: MA6000-OR, if any of the above discrepancies are noted.
8. Inspect unit serial number marking on the yellow portion of the right inflation cell for legibility.
 - a. Restore serial number marking, (If required).
9. Inspect inflator assembly for the following, (Refer to [Figure 6](#)):

NOTE: If plastic cover over actuator is missing or damaged, the PFD is still serviceable.

- a. Damage.
 - b. Lanyard fraying.
 - c. Expiration.
 - d. Green indicator light.
10. Replace inflator assembly, P/N: MA7214 22, if any of the above discrepancies are noted, (Comply with Item [3](#)).

B LEAK TEST PFD

1. Manually inflate PFD.
 - a. Unzip both PFD zippers.
 - b. Inflate the PFD until firm through the oral inflation tube, (Refer to [Figure 7](#)).

WARNING

AVOID EYE CONTACT, INHALATION, AND PROLONGED SKIN CONTACT WITH LEAK TEST COMPOUND. USE IN A WELL VENTILATED AREA. FAILURE TO COMPLY MAY RESULT IN PERSONAL INJURY.

2. Apply leak test compound, P/N: MIL-PRF-25567E, to the oral inflation tube and the CO2 inflation valve.



CAUTION

DO NOT SUBMERGE THE PFD IN WATER TO CHECK FOR LEAKS.

NOTE: If leaks are present, the leaking area will begin bubbling or foaming within 5 seconds and continues for about 2 minutes. Inspect inflated PFD for signs of leakage.

3. Remove PFD from service, if leaks are found.
 - a. Check inflator assembly for proper installation, if leaks are found at the CO2 inflation valve, (Refer to [Figure 8](#)).
 - (1) Test PFD, (Refer to [Step 2 B](#)).

NOTE: PFD repairs may be covered under warranty.

- b. Send PFD to repair facility, if leaks are found at any other location provided the repair cost does not exceed the replace cost.
 - c. Replace PFD, if the repair cost exceeds the replacement cost.

NOTE: The PFD must be set aside, undisturbed, for 2 hours before proceeding.

4. Inspect inflated PFD for signs of deflation or pressure loss after 2 hours.

NOTE: PFD repairs may be covered under warranty.

5. Remove PFD from service if it shows loss of pressure.
 - a. Send PFD to repair facility, if under warranty or repair cost does not exceed the replace cost.
 - b. Replace PFD if repair cost exceeds replace cost.
6. Deflate PFD by inverting the oral tube dust cap, (Refer to [Figure 7](#)):

CAUTION

TO PREVENT DAMAGE TO THE PFD, DO NOT WRING OR TWIST IT WHILE DEFLATING.

7. Gently squeeze the inflated bladder until all air is expelled.
8. Pack PFD.
 - a. Fold PFD panels, (Refer to [Figure 9](#)).
 - b. Secure two-step zippers, (Refer to [Figure 10](#)).

C INSPECT SURVIVAL EQUIPMENT AND PYROTECHNICS

1. Inspect the following attached survival equipment and pyrotechnics, (Refer to MPC [KB0107.0](#) and MPC [KB0096.0](#)):
 - a. Signal whistle.
 - b. Strobe light.
 - c. PLB.
 - d. Signal mirror.
 - e. MK-79 personal distress kit.
 - f. MK-124 smoke and illumination signal.



- g. Survival knife.
2. Verify survival equipment is attached in the correct location, (Refer to Step 1 B).
3. Inspect lanyards attaching all survival equipment to the accessory pockets for the following:
 - a. Cuts or frays.

NOTE: Finished length of line from knot to knot shall be 36 inches or greater.
 - b. Correct length.
 - c. Security of lanyard attachment to equipment and accessory pocket.
4. Replace or re-tie lanyards as required, (Refer to Step 1 B).
5. Store, segregate, or dispose of hazardous materials IAW all applicable local, state, and federal regulations.
6. Document any discrepancies in the MD 3183v22 Maintenance Log.



3 5 YEAR MD 3183V22 INFLATOR ASSEMBLY REPLACEMENT

REFERENCES:

NONE

TOOLS/TEST EQUIPMENT:

NONE

EXPENDABLES:

Re-arm Kit, P/N: MA7214 22, CAGE: 1CJ91, NIIN: 01HS21185

CONSUMABLES:

NONE

A REPLACE

1. Lay out the PFD in a clean area, free of obstructions.
2. Remove inflator assembly, (Refer to [Figure 11](#)).
 - a. Hold the CO2 cylinder through the PFD fabric cover with one hand.
 - b. Insert the metal key from the re-arm kit between the black locking ring and the labeled yellow cap.
 - c. Turn key counterclockwise.
 - d. Turn the black locking ring counterclockwise.
 - e. Lift off the inflator cap.
 - f. Squeeze the PFD sealing ring to elongate for CO2 cylinder removal.
 - g. Remove the CO2 cylinder through the sealing ring.
3. Install new inflator assembly, P/N: MA7214 22, (Refer to [Figure 8](#)).
 - a. Insert new CO2 cylinder pointing upwards into the PFD.
 - b. Hold the CO2 cylinder through the PFD fabric.
 - c. Position cap with water inlet valve to the right.
 - d. Press the cap firmly onto the CO2 cylinder sealing ring.
 - e. Turn the black locking ring clockwise, while pressing on the cap, into the locked position.
 - f. Pull on the cap to ensure it has locked onto the inflator body.
4. Snap the beaded manual inflation lanyard in place.
5. Leak test PFD, (Refer to [Step 2 B](#)).
6. Document any discrepancies in the MD 3183v22 Maintenance Log.



Right Accessory Pocket:
Whistle
Strobe Light
MK-79 Kit
MK-124
Signal Mirror



Survival Knife



HIT Window

Left Accessory Pocket:
PLB



Serial Number Location



Bowline with an Overhand Knot

MD 3183V22 PFD

Figure 1





SURVIVAL EQUIPMENT

Figure 2



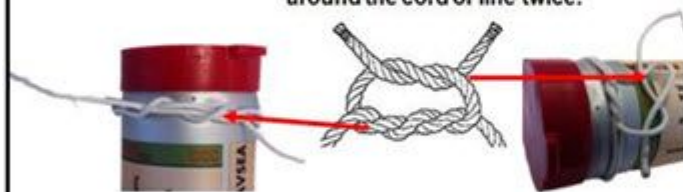
1. Sear cut a piece of Type 1 Nylon cord to facilitate the retention harness tying process.
(Cut approx. 72" long)

2. Wrap two turns of cord around the day end of the signal flare.
(Leave approx. 2" of bitter end)



3. Tie with a Surgeon's knot.

The surgeon's knot is similar to the square knot, except that the first overhand tie is wrapped around the cord or line twice.



4. Tighten the Surgeon's knot, keeping it flat and even.



5. With the approx. 2" of bitter end, Tie an overhand knot to secure the Surgeon's. Sear cut this to prevent fraying

Overhand knot



6. Tighten down the overhand knot.



MK-124 RETENTION HARNESS STEPS 1-6

Figure 3



7. Route the remaining cord along the length of the signal to the opposite end.



8. Between the two raised beads of the night end, wrap two turns of cord around the signal.



9. Wrap the working end around both loops twice.



10. Take the bitter end and go under the line that stretched across the signal.



MK-124 RETENTION HARNESS STEPS 7-10

Figure 4



11. With the working end, go through the loop that was just created, making an overhand knot.



12. Pull tightly



13. Tie an overhand knot to secure the first knot.



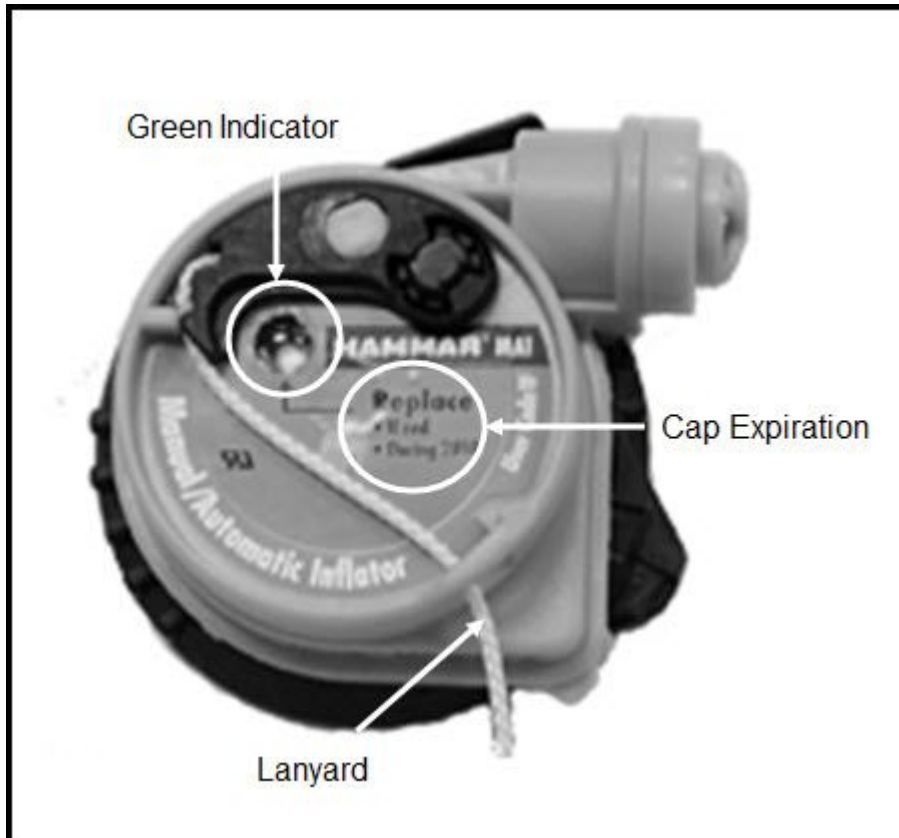
14. Tighten down the overhand knot and secure signal to vest.



MK-124 RETENTION HARNESS STEPS 11-14

Figure 5

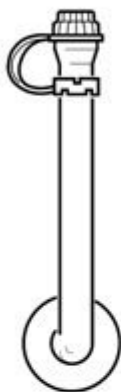




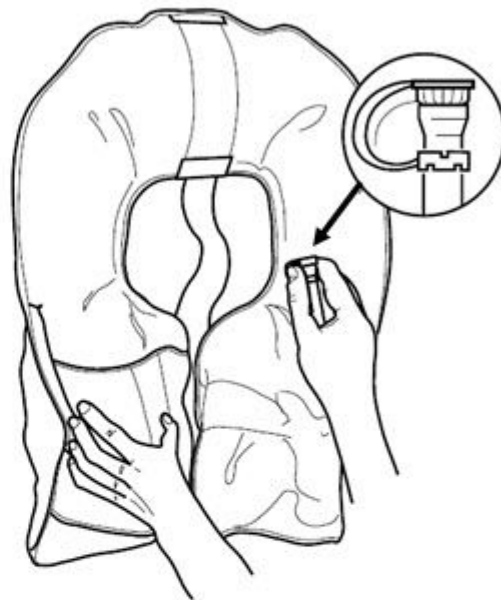
INFLATOR ASSEMBLY
Figure 6



**Inflation Tube Dust Cap,
"stowed" position**



**Inflation Tube Dust Cap,
"inverted" position for
deflation.**



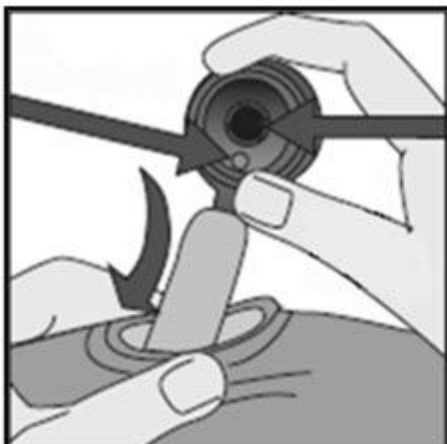
**Oral Inflation
Tube**



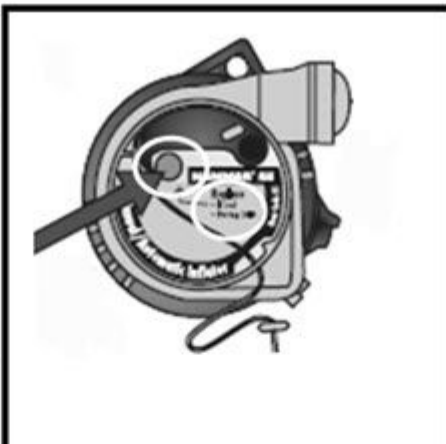
ORAL INFLATION TUBE

Figure 7





1. Check new inflator body for green indicator, then insert with cylinder point upwards into the PFD.



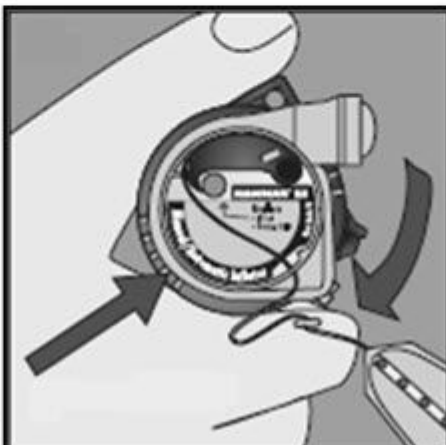
2. Check replacement cap for expiration date and green indicator.



3. Hold cylinder through fabric, position cap with inlet valve to the right.



4. Press cap firmly onto the inflator body and sealing ring.



5. While pressing firmly, turn black locking ring clockwise into the locked position.

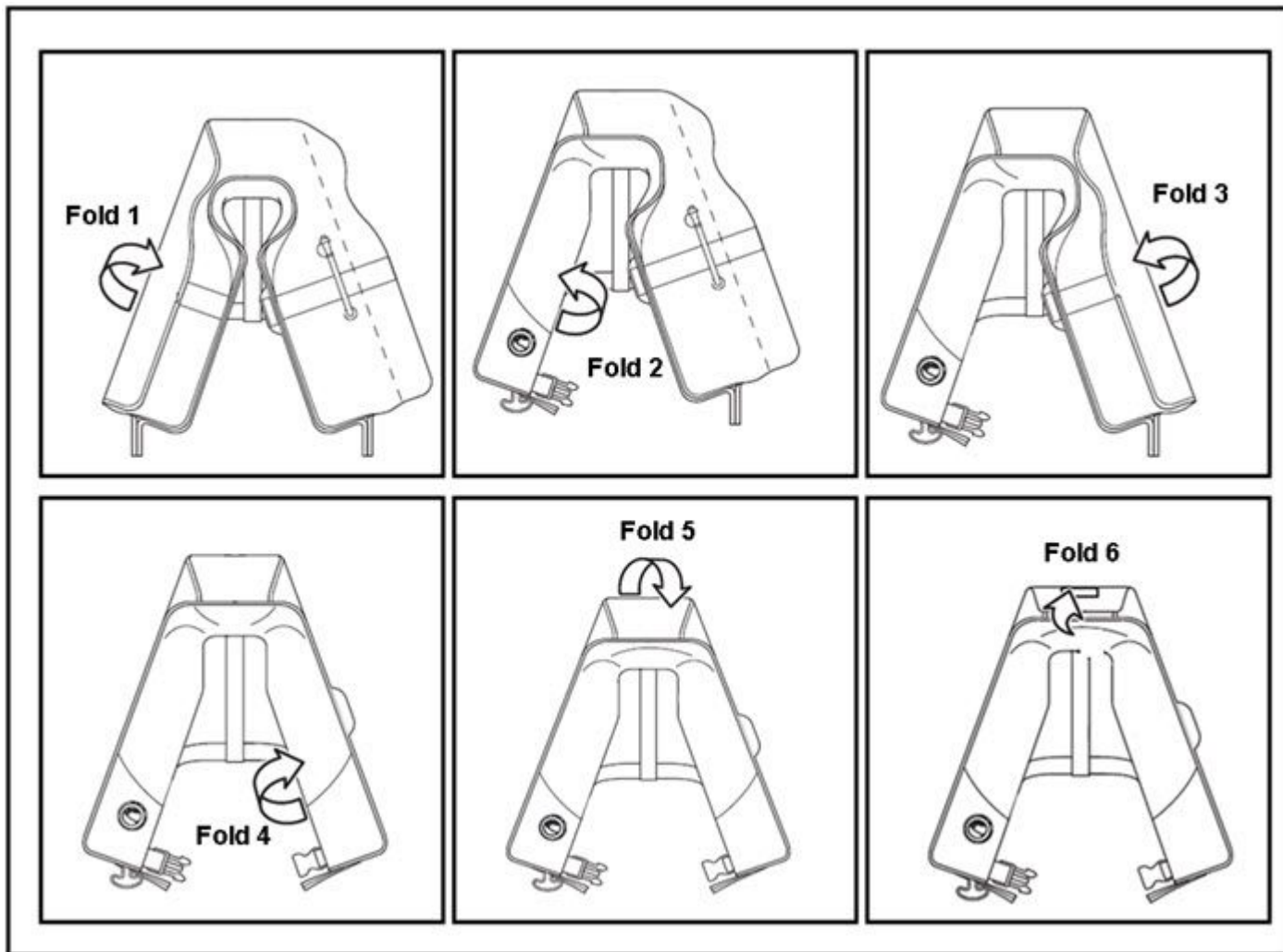


6. Snap beaded inflation lanyard in place.

INFLATION ASSEMBLY INSTALLATION

Figure 8





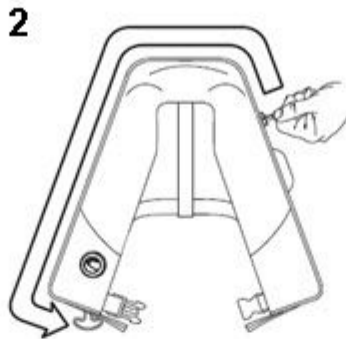
RE-PACKING MD 3183V22

Figure 9

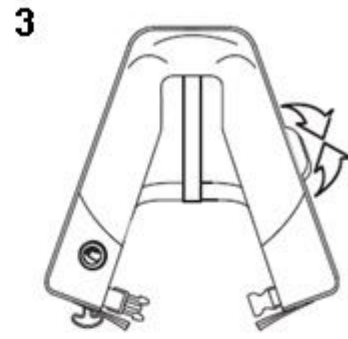




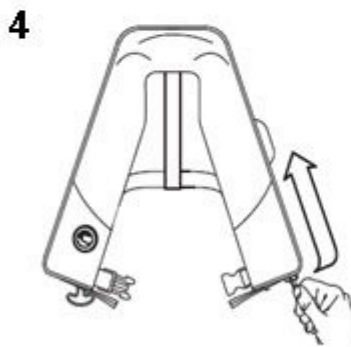
1
Reset zipper 1 by pulling the slider around the top to the velcro tab.



2
Close zipper 1 by pulling the slider in the opposite direction to the end of the zipper.



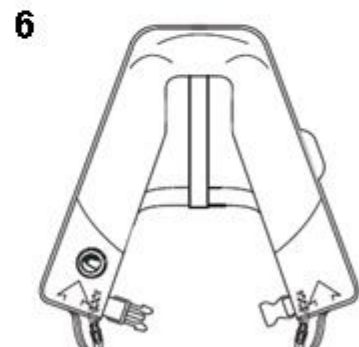
3
Fasten velcro tab to keep the zipper closed.



4
Reset zipper 2 by pulling the slider to the velcro tab.



5
Close zipper 2 by pulling the slider in the opposite direction to the end of the zipper.



6
Push the zipper ends into the openings at the bottom of the PFD.

TWO-STEP ZIPPERS

Figure 10





1. Hold the CO2 cylinder with one hand through the fabric.



2. Insert metal key from the re-arm kit



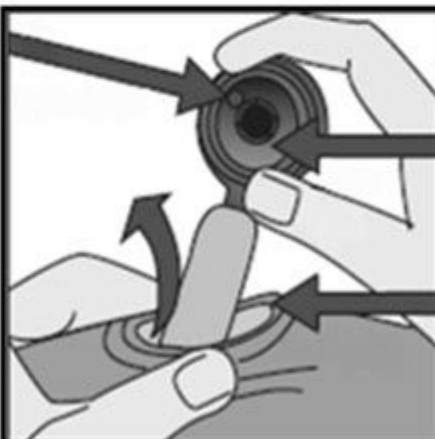
3. Turn key counter-clockwise



4. Turn black locking ring counter-clockwise



5. Lift off cap.



6. Squeeze the sealing ring to elongate and remove the inflator body.

INFLATION ASSEMBLY REMOVAL

Figure 11

